AMENDMENTS TO THE CLAIMS:

This listing of claims, in which new claim 34 is added, will replace all prior versions and listings in the application:

1. (Original) A compound of the following structure

wherein R¹ is H, an alkyl group, an aryl group, an alkenyl group, an alkynyl group, or a halogen atom;

R² is H, an alkyl group, an aryl group, a benzyl group, a trityl group, -SiR^aR^bR^c, CH₂OR^d, or COR^c;

Ra, Rb and Rc are independently an alkyl group or an aryl group;

R^d is an alkyl group, an aryl group, an alkoxylalkyl group, -RⁱSiR^aR^bR^c or a benzyl group, wherein Rⁱ is an alkylene group;

 R^e is an alkyl group, an allyl group, a benzyl group, an aryl group, an alkoxy group, or $-NR^gR^h$, wherein R^g and R^h are independently H, an alkyl group or an aryl group;

 R^3 is $(CH_2)_n$ where n is and integer in the range of 0 to 5, $-CH_2CH(CH_3)_-$, $-CH=CH_-$, $-CH=C(CH_3)_-$, or -C=C-;

R⁴ is $(CH_2)_p$ where p is an integer in the range of 4 to 12, $-(CHR^{k1})_{y1}(CHR^{k2})_{y2}(CHR^{k3})_{y3}(CHR^{k4})_{y4}(CHR^{k5})_{y5}C(R^{s1})=C(R^{s2})C(R^{s3})=C(R^{s4})_{-},$ $-(CHR^{k1})_{y1}(CHR^{k2})_{y2}(CHR^{k3})_{y3}(CHR^{k4})_{y4}(CHR^{k5})_{y5}CH(R^{s1})CH(R^{s2})C(R^{s3})=C(R^{s4})_{-},$ $-(CHR^{k1})_{y1}(CHR^{k2})_{y2}(CHR^{k3})_{y3}(CHR^{k4})_{y4}(CHR^{k5})_{y5}C(R^{s1})=C(R^{s2})CH(R^{s3})CH(R^{s4})_{-},$ $-(CHR^{k1})_{y1}(CHR^{k2})_{y2}(CHR^{k3})_{y3}(CHR^{k4})_{y4}(CHR^{k5})_{y5}CH(R^{s1})CH(R^{s2})CH(R^{s3})CH(R^{s4})_{-},$ wherein y1 and y2 are 1 and y3, y4 and y5 are independently 0 or 1, R^{k1} , R^{k2} , R^{k3} , R^{k4} and R^{k5} are independently H, CH₃, or OR^{2a} , and R^{s1} , R^{s2} , R^{s3} , R^{s4} are independently H or

CH₃, wherein R^{2a} is H, an alkyl group, an aryl group, a benzyl group, a trityl group, $-SiR^aR^bR^c$, CH_2OR^d , or COR^c ; and

R⁵ is H or OR^{2b}, wherein R^{2b} is H, an alkyl group, an aryl group, a benzyl group, a trityl group, -SiR^aR^bR^c, CH₂OR^d, or COR^c; provided that the compound is not dictyostatin 1.

2. (Original) The compound of claim 1 with the following stereostructure, or its enantiomer

$$R^2O$$
 R^3
 R^5
 R^5
 R^5

wherein R^1 is alkenyl; R^2 is H; R^3 is $-CH_2CH(CH_3)$ or $-CH=C(CH_3)$; and R^4 is $-(CHR^{k1})_{y1}(CHR^{k2})_{y2}(CHR^{k3})_{y3}(CHR^{k4})_{y4}(CHR^{k5})_{y5}C(R^{s1})=C(R^{s2})C(R^{s3})=C(R^{s4})$ - wherein y1-y4 are 1, y5 is 0, R^{k1} and R^{k3} are OH, R^{k2} is H, R^{k4} is CH₃, R^{s1} , R^{s2} , R^{s3} and R^{s4} are H, and R^5 is OH.

3. (Original) The compound of claim 2 wherein R¹ is -CH=CH₂ and R⁴ is

Claims 4 - 27 (Canceled)

28. (Original) A process for conversion of a first compound with the formula

wherein R¹ is H, an alkyl group, an aryl group, an alkenyl group, an alkynyl group, or a halogen atom;

R² is H, an alkyl group, an aryl group, a benzyl group, a trityl group, -SiR^aR^bR^c, CH₂OR^d, or COR^c;

R^{2d} is H

 R^{a} , R^{b} and R^{c} are independently an alkyl group or an aryl group;

 R^d is an alkyl group, an aryl group, an alkoxylalkyl group, $-R^iSiR^aR^bR^c$ or a benzyl group, wherein R^i is an alkylene group;

R^e is an alkyl group, an allyl group, a benzyl group, an aryl group, an alkoxy group, or -NR^gR^h, wherein R^g and R^h are independently H, an alkyl group or an aryl group;

 R^3 is $(CH_2)_n$ where n is and integer in the range of 0 to 5, $-CH_2CH(CH_3)$ -, -CH=CH-, $-CH=C(CH_3)$ -, or -C=C-;

 R^4 is $(CH_2)_p$ where p is an integer in the range of 4 to 12, $-(CHR^{k1})_{y1}(CHR^{k2})_{y2}(CHR^{k3})_{y3}(CHR^{k4})_{y4}(CHR^{k5})_{y5}C(R^{s1})=C(R^{s2})C(R^{s3})=C(R^{s4})-$, $-(CHR^{k1})_{y1}(CHR^{k2})_{y2}(CHR^{k3})_{y3}(CHR^{k4})_{y4}(CHR^{k5})_{y5}CH(R^{s1})CH(R^{s2})C(R^{s3})=C(R^{s4})-$, $-(CHR^{k1})_{y1}(CHR^{k2})_{y2}(CHR^{k3})_{y3}(CHR^{k4})_{y4}(CHR^{k5})_{y5}C(R^{s1})=C(R^{s2})CH(R^{s3})CH(R^{s4})-$, $-(CHR^{k1})_{y1}(CHR^{k2})_{y2}(CHR^{k3})_{y3}(CHR^{k4})_{y4}(CHR^{k5})_{y5}CH(R^{s1})CH(R^{s2})CH(R^{s3})CH(R^{s4})-$, wherein y1 and y2 are 1 and y3, y4 and y5 are independently 0 or 1, R^{k1} , R^{k2} , R^{k3} , R^{k4} and R^{k5} are independently H. CH₂, or OR^{2a} and R^{s1} , R^{s2} , R^{s3} are independently H. CH₂, or OR^{2a} and R^{s1} , R^{s2} , R^{s3} are independently H. Or

and R^{k5} are independently H, CH₃, or OR^{2a}, and R^{s1}, R^{s2}, R^{s3}, R^{s4} are independently H or CH₃, wherein R^{2a} is H, an alkyl group, an aryl group, a benzyl group, a trityl group, -SiR^aR^bR^c, CH₂OR^d, or COR^c;

 R^5 is H or OR^{2b} , wherein R^{2b} is H, an alkyl group, an aryl group, a benzyl group, a trityl group, $-SiR^aR^bR^c$, CH_2OR^d , or COR^e ; and R^{10} is H;

to a second compound with the formula

comprising the step of reacting the first compound under conditions suitable to effect macrolactonization.

29. (Original) The process of claim 28 for conversion of a compound with the following stereostructure or its enantiomer

$$R^{2}O$$
 R^{3}
 R^{5}
 R^{1}
 $R^{2}O$
 R^{4}
 $CO_{2}R^{10}$

wherein R^1 is H, an alkyl group, an alkenyl group, an alkynyl group, or a halogen atom; R^2 is H, an alkyl group, an aryl group, a benzyl group, a trityl group, $-SiR^aR^bR^c$, CH_2OR^d , or COR^e ;

R^{2d} is H

R^a, R^b and R^c are independently an alkyl group or an aryl group;

R^d is an alkyl group, an aryl group, an alkoxylalkyl group, -RⁱSiR^aR^bR^c or a benzyl-group, wherein Rⁱ is an alkylene group;

 R^c is an alkyl group, an allyl group, a benzyl group, an aryl group, an alkoxy group, or $-NR^gR^h$, wherein R^g and R^h are independently H, an alkyl group or an aryl group; R^3 is $(CH_2)_n$ where n is and integer in the range of 0 to 5, $-CH_2CH(CH_3)$ -, -CH=CH-, $-CH=C(CH_3)$ -, or $-C\equiv C$ -;

R⁴ is (CH₂)_p where p is an integer in the range of 4 to 12, -(CHR^{k1})_{y1}(CHR^{k2})_{y2}(CHR^{k3})_{y3}(CHR^{k4})_{y4}(CHR^{k5})_{y5}C(R^{s1})=C(R^{s2})C(R^{s3})=C(R^{s4})-, -(CHR^{k1})_{y1}(CHR^{k2})_{y2}(CHR^{k3})_{y3}(CHR^{k4})_{y4}(CHR^{k5})_{y5}CH(R^{s1})CH(R^{s2})C(R^{s3})=C(R^{s4})-, -(CHR^{k1})_{y1}(CHR^{k2})_{y2}(CHR^{k3})_{y3}(CHR^{k4})_{y4}(CHR^{k5})_{y5}C(R^{s1})=C(R^{s2})CH(R^{s3})CH(R^{s4})-, -(CHR^{k1})_{y1}(CHR^{k2})_{y2}(CHR^{k3})_{y3}(CHR^{k4})_{y4}(CHR^{k5})_{y5}CH(R^{s1})CH(R^{s2})CH(R^{s3})CH(R^{s4})-, wherein y1 and y2 are 1 and y3, y4 and y5 are independently 0 or 1, R^{k1}, R^{k2}, R^{k3}, R^{k4} and R^{k5} are independently H, -CH₃, or OR^{2a}, and R^{s1}, R^{s2}, R^{s3}, R^{s4} are independently H or CH₃, wherein R^{2a} is H, an alkyl group, an aryl group, a benzyl group, a trityl group, -SiR^aR^bR^c, CH₂OR^d, or COR^e; and R⁵ is H or OR^{2b}, wherein R^{2b} is H, an alkyl group, an aryl group, a benzyl group, a trityl group, -SiR^aR^bR^c, CH₂OR^d, or COR^e; and R¹⁰ is H

to a second compound with the formula

$$R^2O$$
 R^3
 R^5
 R^1
 R^4

30. (Original) The process of Claim 29 wherein R^1 is alkenyl; R^3 is $CH_2CH(CH_3)$ or $CH=C(CH_3)$; and R^4 is $-(CHR^{k1})_{y1}(CHR^{k2})_{y2}(CHR^{k3})_{y3}(CHR^{k4})_{y4}(CHR^{k5})_{y5}C(R^{s1})=C(R^{s2})C(R^{s3})=C(R^{s4})$ - wherein y1-y4 are 1, y5 is 0, R^{k1} and R^{k3} are R^{2a} , R^{k2} is H, R^{k4} is CH_3 , R^{s1} - R^{s4} are H, and R^5 is CR^{2b} .

31. (Original) The process of claim 29 wherein R¹ is CH=CH₂ and R⁴ is

- 32. (Original) The process of claim 28 wherein the first compound is reacted with 2,4,6-trichlorobenzoylchloride.
- 33. (Original) The process of claim 29 wherein the first compound is reacted with 2,4,6-trichlorobenzoylchloride.
 - 34. (New) The compound of claim 2 wherein R¹ is -CH=CH₂ and R⁴ is: